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         Apr 09
                 BEILSTEIN: Reload and Implementation of a New Subject Area
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         Apr 09
                 ZDB will be removed from STN
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         Apr 19
                 US Patent Applications available in IFICDB, IFIPAT, and IFIUDB
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NEWS 7
NEWS 8
NEWS 9
         Apr 22
                 Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS
         Apr 22
                 BIOSIS Gene Names now available in TOXCENTER
         Apr 22
                 Federal Research in Progress (FEDRIP) now available
         Jun 03
                 New e-mail delivery for search results now available
NEWS 10 Jun 10
                 MEDLINE Reload
NEWS 11 Jun 10
                 PCTFULL has been reloaded
NEWS 12 Jul 02
                 FOREGE no longer contains STANDARDS file segment
NEWS 13 Jul 22
                 USAN to be reloaded July 28, 2002;
                 saved answer sets no longer valid
NEWS 14 Jul 29
                 Enhanced polymer searching in REGISTRY
NEWS 15
        Jul 30
                 NETFIRST to be removed from STN
NEWS 16 Aug 08
                 CANCERLIT reload
NEWS 17
        Aug 08
                 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18
        Aug 08
                 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE)
                 now available on STN
NEWS 20 Aug 19
                 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19
                 The MEDLINE file segment of TOXCENTER has been reloaded
                 Sequence searching in REGISTRY enhanced
NEWS 22 Aug 26
                 JAPIO has been reloaded and enhanced
NEWS 23 Sep 03
NEWS 24 Sep 16
                 Experimental properties added to the REGISTRY file
NEWS 25
         Sep 16
                 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS EXPRESS February 1 CURRENT WINDOWS VERSION IS V6.0d,
              CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP),
              AND CURRENT DISCOVER FILE IS DATED 05 FEBRUARY 2002
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              Direct Dial and Telecommunication Network Access to STN
NEWS PHONE
NEWS WWW
             CAS World Wide Web Site (general information)
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FILE 'HOME' ENTERED AT 16:52:51 ON 19 SEP 2002

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 18 SEP 2002 HIGHEST RN 452896-77-4 DICTIONARY FILE UPDATES: 18 SEP 2002 HIGHEST RN 452896-77-4

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details: http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=>
Uploading 09910702.str

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

G1 O, N

G2 H, Cy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s (pyrimidin? or thiadiazol? or pyridazin? or pyrazin?)
 636120 PYRIMIDIN?
 122107 THIADIAZOL?
 103648 PYRIDAZIN?
 88606 PYRAZIN?

L2 937382 (PYRIMIDIN? OR THIADIAZOL? OR PYRIDAZIN? OR PYRAZIN?)

=> s l1

SAMPLE SEARCH INITIATED 16:53:43 FILE 'REGISTRY'

09/ 910,702

SAMPLE SCREEN SEARCH COMPLETED - 72593 TO ITERATE

1000 ITERATIONS 1.4% PROCESSED

3 ANSWERS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS:

EXCEEDS 1000000

PROJECTED ANSWERS:

EXCEEDS 3470

1.3

3 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 16:53:50 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - >1,000,000 TO ITERATE

< 10.7% PROCESSED 107088 ITERATIONS

774 ANSWERS

<----> User Break---->

14.9% PROCESSED 148952 ITERATIONS

838 ANSWERS

SEARCH ENDED BY USER SEARCH TIME: 00.00.20

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**

BATCH **INCOMPLETE**

PROJECTED ITERATIONS:

EXCEEDS 1000000

PROJECTED ANSWERS:

EXCEEDS 7873

838 SEA SSS FUL L1

=> s l1 sub=12

ENTER SUBSET SEARCH SCOPE - SAMPLE, FULL, RANGE, OR (END):full FULL SUBSET SEARCH INITIATED 16:54:29 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED - 38339 TO ITERATE

100.0% PROCESSED 38339 ITERATIONS 619 ANSWERS

SEARCH TIME: 00.00.03

619 SEA SUB=L2 SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 296.94 297.15

FILE 'CAPLUS' ENTERED AT 16:54:39 ON 19 SEP 2002 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE LAST UPDATED: 18 Sep 2002 (20020918/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> s 15

L6 500 L5

=> s 16 and leukocyte?
 78213 LEUKOCYTE?

L7 14 L6 AND LEUKOCYTE?

=> d l7 1- ibib abs fhitstr

YOU HAVE REQUESTED DATA FROM 14 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:521509 CAPLUS

DOCUMENT NUMBER:

137:88482

TITLE:

Combined use of enzyme inhibitors and pharmaceutical preparations thereof for the treatment and prophylaxis of arteriosclerosis, type I allergic reactions, and dermatological diseases associated with follicular and

epidermal hyperkeratosis

INVENTOR(S):

Ansorge, Siegfried; Lendeckel, Uwe; Neubert, Klaus; Reinhold, Dirk; Vetter, Robert; Gollnick, Harald

PATENT ASSIGNEE(S):

Institut Fuer Medizintechnologie Magdeburg G.m.b.H.,

Germany

SOURCE:

PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                   KIND DATE
                                         APPLICATION NO. DATE
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    WO 2002053170
                    A2 20020711
                                        WO 2001-EP15199 20011221
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM,
            HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
            LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO,
            RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ,
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        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
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            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
    DE 10100052
                     A1
                           20020711
                                         DE 2001-10100052 20010102
    DE 10102392
                           20020814
                      A1
                                         DE 2001-10102392 20010119
PRIORITY APPLN. INFO.:
                                       DE 2001-10100052 A 20010102
                                       DE 2001-10102392 A 20010119
                                       DE 2001-10155093 A 20011109
```

OTHER SOURCE(S): MARPAT 137:88482

AB The invention discloses the use of inhibitors of dipeptidyl peptidase IV (DPP IV) and enzymes having the same substrate specificity, combined with inhibitors of alanyl aminopeptidase (aminopeptidase N), or enzymes having the same substrate specificity, for the additive to superadditive inhibition of the activation and proliferation (DNA synthesis) of human T lymphocytes or mononuclear cells and of the prodn. of TH2 cytokines for

the treatment and prevention of allergic reactions of type I (according to the Gell and Coombs classification), for the additive to superadditive inhibition of the activation and proliferation (DNA synthesis) of human epidermal and follicular keratinocytes and those of the transition region between the skin and the mucosa, and for the treatment and prevention of dermatol. diseases assocd. with follicular and epidermal hyperkeratosis and increased keratinocyte proliferation. The invention also discloses the use of DPP IV and enzymes having the same substrate specificity, combined with inhibitors of aminopeptidase N or enzymes having the same substrate specificity, inhibitors of X-pro-aminopeptidase (aminopeptidase P), inhibitors of angiotensin-converting enzyme (ACE) and/or of prolyloligopeptidase (prolylendopeptidase) for the additive to superadditive inhibition of the activation, DNA synthesis and proliferation of human T lymphocytes or mononuclear cells for the treatment and prophylaxis of arteriosclerosis. The invention further discloses pharmaceutical prepns. comprising a plurality of inhibitors of the above enzymes.

IT 88768-40-5, Cilazapril

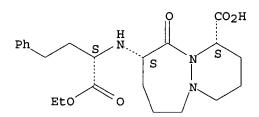
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(enzyme inhibitor combinations for treatment of arteriosclerosis, type I allergic reactions, and dermatol. diseases assocd. with follicular and epidermal hyperkeratosis)

RN 88768-40-5 CAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



ANSWER 2 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2002:90040 CAPLUS

DOCUMENT NUMBER: 136:135022

TITLE: Preparation of heteroaryl-.beta.-alanine derivatives

as antiinflammatory agents and .alpha.4 integrin

inhibitors

INVENTOR(S): Konradi, Andrei W.; Pleiss, Michael A.; Thorsett,

Eugene D.; Ashwell, Susan; Welmaker, Gregory S.;

Kreft, Anthony; Sarantakis, Dimitrios; Dressen, Darren

B.; Grant, Francine S.; Semko, Christopher; Xu,

Ying-Zi

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA; American Home

Products Corporation PCT Int. Appl., 141 pp.

CODEN: PIXXD2

CODEN: PIAND

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

SOURCE:

PATENT NO. KIND DATE APPLICATION NO. DATE

```
20020131
                                          WO 2001-US23096 20010720
    WO 2002008222
                      A2
                           20020613
    WO 2002008222
                     A3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ,
            VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                        US 2001-910431 20010719
                     A1 20020704
    US 2002086882
                                       US 2000-220128P P 20000721
PRIORITY APPLN. INFO.:
                        MARPAT 136:135022
OTHER SOURCE(S):
```

Ι

Disclosed are a series of heteroaryl-.beta.-alanine derivs. I wherein R is a carboxylic acid; R1 and R2 are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, cycloalkyl, substituted cycloalkyl, or R1 and R2, together with the nitrogen atom to which they are attached, are joined to form an optionally substituted heterocyclic ring provided that said substituted alkyl, substituted alkenyl and substituted cycloalkyl do not carry an aryl, substituted aryl, heteroaryl or substituted heteroaryl group; Ra and R3 are independently a hydrogen or a Me group; R4 and R5 are independently selected from the group consisting of heteroatom group; n is zero or an integer 1; Alk is a straight or branched alkylene chain; Ar is an optionally substituted arom. or heteroarom. group, as well as their pharmaceutical use as .alpha.4.beta.7 Integrin inhibitors for the treatment of inflammatory diseases. Thus, 3-[4-(3,5-dichloropyrid-4ylcarboxamido)phenyl]-2-(3-chlorophenylamino)propanoic acid was prepd. as .alpha.4 Integrin inhibitor. The preferred compds. of the invention generally have IC50 values in the .alpha.4.beta.1 and .alpha.a.beta.7 assays of 1 .mu.M and below. In the other assays featuring .alpha. integrins of other subgroups the same compds. had IC50 values of 50 .mu.M and above thus demonstrating the potency and selectivity of their action against .alpha.4 integrins. Title compds. were prepd. for treating an inflammatory condition in a mammalian patient which condition is mediated by Very Late Antigen 4 (VLA-4). Inflammatory condition is selected from the group consisting of asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, multiple sclerosis, rheumatoid arthritis, tissue transplantation, tumor metastasis, meningitis, encephalitis, stroke, nephritis, retinitis, atopic dermatitis, psoriasis, myocardial ischemia and acute leukocyte-mediated lung injury.

IT 263274-39-1P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES

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09/ 910,702
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(Uses)

(prepn. of heteroaryl-.beta.-alanine derivs. as antiinflammatory agents and .alpha.4 integrin inhibitors)

263274-39-1 CAPLUS RN

L-Phenylalanine, N-(6-chloro-4-pyrimidinyl)-4-[[(3,5-dichloro-4-CN pyridinyl)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 3 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:90026 CAPLUS

136:135019

DOCUMENT NUMBER: TITLE:

Preparation of 3-amino-2-(4-aminocarbonyloxy)phenyl-

propionic acid derivatives as antiinflammatory agents

and .alpha.4 Integrin inhibitors

INVENTOR(S):

Konradi, Andrei W.; Pleiss, Michael A.; Thorsett, Eugene D.; Ashwell, Susan; Welmaker, Gregory S.;

Kreft, Anthony; Sarantakis, Dimitrios; Dressen, Darren

B.; Grant, Francine S.; Xu, Ying-Zi

PATENT ASSIGNEE(S):

Elan Pharmaceuticals, Inc., USA; American Home

Products Corporation

SOURCE:

PCT Int. Appl., 137 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	KIND DATE				A.	PPLI	CATIO	ο.	DATE									
WO	WO 2002008206			A1		20020131		WO 2001-US23073 20010720										
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		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	
		RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	ŪĠ,	UZ,	
		VN,	ΥU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM				
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
US 2002055509 A1 20020509 US 2001-910685 20010720																		
PRIORIT	Y APP	LN.	INFO	. :				τ	JS 20	000-2	22013	34P	P	20000	721			
OTHER S	OURCE	(S):			MAR	PAT :	136:	1350	19									
GI																		

3-Amino-2-(4-aminocarbonyloxy) phenyl-propionic acid derivs. I wherein R is AΒ a carboxylic acid; R1 and R2 are independently selected from the group consisting of hydrogen, alkyl, substituted alkyl, alkenyl, substituted alkenyl, cycloalkyl, substituted cycloalkyl, or R1 and R2, together with the nitrogen atom to which they are attached, are joined to form an optionally substituted heterocyclic ring provided that said substituted alkyl, substituted alkenyl and substituted cycloalkyl do not carry an aryl, substituted aryl, heteroaryl or substituted heteroaryl group; Ra and R3 are independently a hydrogen or a Me group; R4 and R5 are independently selected from the group consisting of heteroatom group; n is zero or an integer 1; Alk is a straight or branched alkylene chain; Ar is an optionally substituted arom. or heteroarom. group, as well as their pharmaceutical use as .alpha.4.beta.7 Integrin inhibitors for the treatment of inflammatory diseases. Thus, 3-[4-(3,5-dichloropyrid-4ylcarboxamido)phenyl]-2-(3-chlorophenylamino)propanoic acid was prepd. as .alpha.4 Integrin inhibitor. The preferred compds. of the invention generally have IC50 values in the .alpha.4.beta.1 and .alpha.a.beta.7 assays of 1 .mu.M and below. In the other assays featuring .alpha. integrins of other subgroups the same compds. had IC50 values of 50 .mu.M and above thus demonstrating the potency and selectivity of their action against .alpha.4 integrins. Title compds. were prepd. for treating an inflammatory condition in a mammalian patient which condition is mediated by Very Late Antigen 4 (VLA-4). Inflammatory condition is selected from the group consisting of asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, multiple sclerosis, rheumatoid arthritis, tissue transplantation, tumor metastasis, meningitis, encephalitis, stroke, nephritis, retinitis, atopic dermatitis, psoriasis, myocardial ischemia and acute leukocyte-mediated lung injury.

Ι

IT 263274-39-1P

RL: IMF (Industrial manufacture); PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of aminoaminocarbonyloxyphenylpropionic acid derivs. as a integrin inhibitors)

RN 263274-39-1 CAPLUS

CN L-Phenylalanine, N-(6-chloro-4-pyrimidinyl)-4-[[(3,5-dichloro-4-pyridinyl)carbonyl]amino]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:90023 CAPLUS

DOCUMENT NUMBER:

136:135018

TITLE:

Preparation of 3-(heteroaryl) alanine derivatives as

inhibitors of leukocyte adhesion mediated by

VLA-4

INVENTOR(S):

Konradi, Andrei W.; Pleiss, Michael A.; Thorsett, Eugene D.; Ashwell, Susan; Welmaker, Gregory S.;

Kreft, Anthony; Sarantakis, Dimitrios; Dressen, Darren

B.; Grant, Francine S.; Semko, Christopher; Xu,

Ying-Zi; Stappenbeck, Frank

PATENT ASSIGNEE(S):

Elan Pharmaceuticals, Inc., USA; American Home

Products Corporation

SOURCE:

PCT Int. Appl., 132 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIND I		DATE			PPLI	CATIO	ON NO	ο.	DATE				
WO	2002	0082	03	A2		20020131		WO 2001-US23097 20010720										
WO	2002	0082	03	A3 200205		0523												
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														PT,			BF,	
											-	-	-	SN,	-	TG		
US	2002	0523	75	A:	1 :	20020	0502		U	S 200	01-93	L046	5	20010	719			
PRIORIT										000-2	22013	31P	P	20000	721			
OTHER S	OURCE	(S):			MAR	PAT :	136:3	1350	18									

cycloalkyl, or heterocyclic group; R2 = a nitrogen contg. (un) substituted, heteroaryl; Y = (CH2)m; m = 0 or 1; R1 = H, (un) substituted, alkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, heteroaryl, or heterocyclic; X = OH, (un) substituted alkoxy, alkenoxy, cycloalkoxy, cycloalkenoxy, aryloxy, heteroaryloxy, heterocyclyloxy, or NR3R3 [R3 = H, (un) substituted alkyl, alkenyl, cycloalkyl, aryl, heteroaryl, or heterocyclic]] were prepd. as inhibitors of leukocyte adhesion mediated by VLA-4. Compds. I have binding affinity to VLA-4 as expressed by an IC50 of about 15 .mu.M or less. Thus, N-[5-(2,2,2-trifluoroethyl)pyrimidin-4-yl]-DL-3-[5-(2,5-dimethoxyphenyl)pyridin-2-yl]alanine was prepd. by multistep procedure via coupling of DL-[5-(2,6-dimethoxyphenyl)pyridine-2-yl]alanine Et ester and 4,6-dichloro-5-(2,2,2-trifluoroethyl)pyrimidine.

IT 392298-39-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of alanine derivs. as inhibitors of **leukocyte** adhesion mediated by VLA-4)

RN 392298-39-4 CAPLUS

2-Pyridinepropanoic acid, 5-(2,6-dimethoxyphenyl)-.alpha.-[[5-(trifluoromethyl)-4-pyrimidinyl]amino]- (9CI) (CA INDEX NAME)

L7 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:90022 CAPLUS

DOCUMENT NUMBER:

136:129056

TITLE:

CN

.alpha.-Amino acid derivatives for inhibitors of

leukocyte adhesion mediated by VLA-4

INVENTOR(S):

Konradi, Andrei W.; Pleiss, Michael A.; Thorsett, Eugene D.; Ashwell, Susan; Welmaker, Gregory S.;

Kreft, Anthony; Sarantakis, Dimitrios; Dressen, Darren

B.; Grant, Francine S.; Semko, Christopher; Xu,

Ying-Zi

PATENT ASSIGNEE(S):

Elan Pharmaceuticals, Inc., USA; American Home

Products Corporation

SOURCE:

PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE		APPLICATION NO. DATE										
			_											
WO 2002008202	2 A2	2002013	l	WO 2001-US23075 20010720										
W: AE, 2	AG, AL, A	M, AT, AU	AZ, E	BA, BB,	BG, BR,	BY, BZ	, CA,	CH,	CN,					
CO, (CR, CU, C	Z, DE, DK	, DM, D	OZ, EC,	EE, ES,	FI, GE	, GD,	GE,	GH,					
GM, H	HR, HU, I	D, IL, IN	IS, J	JP, KE,	KG, KP,	KR, KZ	, LC,	LK,	LR,					
LS, 1	LT, LU, L	V, MA, MD	MG, M	MK, MN,	MW, MX,	MZ, NO	, NZ,	PL,	PT,					
		SE, SG, SI												
VN,	YU, ZA, Z	ZW, AM, AZ	BY, K	KG, KZ,	MD, RU,	TJ, TN								
RW: GH, (GM, KE, L	S, MW, MZ	SD, S	SL, SZ,	TZ, UG,	ZW, AT	, BE,	CH,	CY,					
DE, I	OK, ES, F	I, FR, GB	GR, I	E, IT,	LU, MC,	NL, PI	, SE,	TR,	BF,					
ВJ, (CF, CG, C	CI, CM, GA	GN, G	∃Q, GW,	ML, MR,	NE, SN	, TD,	TG						

20020502 US 2001-910702 20010720 US 2002052470 **A1** PRIORITY APPLN. INFO.: US 2000-220132P P 20000721 OTHER SOURCE(S): MARPAT 136:129056

Disclosed are certain .alpha.-amino acid compds. which bind VLA-4. Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, such as asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Prepn. of N-[5-(2,2,2-trifluoroethyl)pyrimidin-4-yl]-L-4'-(1-methyl-4methoxy-2-pyridon-3-yl)phenylalanine is described.

IT 393138-31-3P

> RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(.alpha.-amino acid derivs. for inhibitors of leukocyte adhesion mediated by VLA-4, and therapeutic use)

RN 393138-31-3 CAPLUS

CN L-Phenylalanine, 4-(1,2-dihydro-4-methoxy-1-methyl-2-oxo-3-pyridinyl)-N-[5-(2,2,2-trifluoroethyl)-4-pyrimidinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 6 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

2002:51439 CAPLUS

DOCUMENT NUMBER:

136:118460

TITLE:

Preparation of squaric acid derivatives containing a bicyclic heteroaromatic ring as integrin antagonists

INVENTOR(S):

Langham, Barry John; Alexander, Rikki Peter; Head, John Clifford; Linsley, Janeen Marsha; Porter, John Robert; Archibald, Sarah Catherine; Warrellow, Graham

John

PATENT ASSIGNEE(S):

SOURCE:

Celltech R & D Limited, UK

PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ----------20010705 WO 2002004426 **A1** WO 2001-GB3028 20020117 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

```
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT,
            RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US,
            UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                          US 2001-899488 20010705
                          20020808
    US 2002107263
                      A1
                                                        A 20000707
PRIORITY APPLN. INFO.:
                                        GB 2000-16785
                                                         A 20001121
                                        GB 2000-28364
                        MARPAT 136:118460
OTHER SOURCE(S):
```

$$\begin{bmatrix} N & R^1 \\ Het & L^2Ar^2Alk - N & L^1[Alk^1]_R^2 \\ R^16 \end{bmatrix}_g$$

The title compds. [I; Het = (un) substituted bicyclic fused ring AB heteroarom. group; R16 = H, alkyl, etc.; g = 0-4; L2 = a bond, O, S, CO, etc.; Ar2 = (un)substituted (hetero)arom.; Alk = CH2CHR, CH:CR, CH(CH2R), C(:CHR) (wherein R = CO2H or a deriv. or biostere thereof); R1 = H, alkyl; L1 = a covalent bond, a linker atom or group; Alk1 = (un)substituted aliph. chain; n = 0-1; R2 = H, (un) substituted heteroaliph., cycloaliph., heterocycloaliph., polycycloalphatic, heteropolycycloaliph., arom. or heteroarom. group other than a 2,6-naphthyridin-1-yl, isoquinolin-1-yl, 2,7-naphthyridin-1-yl or quinazolin-4-yl] which are able to inhibit the binding of integrins to their ligands and are of use in the prophylaxis and treatment of immune or inflammatory disorders, or disorders involving the inappropriate growth or migration of cells, were prepd. Thus, reacting Et (S)-2-amino-3-{4-[(1-methylbenzimidazol-2yl)amino]phenyl}propanoate.CF3CO2H with diisopropylsquarate in the presence of DIPEA in iso-Pr followed by treatment of the resulting Et $(S) - 2 - \{ [2 - (isopropoxy) - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - \{ 4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino \} - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - 3 - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] amino] - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - 3, 4 - dioxo - 1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - [(1 - cyclobutenyl] - (1 - cyclobutenyl] - [4 - cyclobutenyl]$ methylbenzimidazol-2-yl)amino|phenyl}propanoate with dipropylamine in MeOH afforded II. The exemplified compds. I showed IC50 of .ltoreq. 1 .mu.M in the .alpha.4.beta.1 and .alpha.4.beta.7 assays. IT 389637-06-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of squaric acid derivs. contg. a bicyclic heteroarom. ring as integrin antagonists)

RN 389637-06-3 CAPLUS

CN L-Phenylalanine, N-[2-(1-methylethoxy)-3,4-dioxo-1-cyclobuten-1-yl]-4-

(thieno[2,3-d]pyrimidin-4-ylamino)-, methyl ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2002 ACS ACCESSION NUMBER: 2001:868260 CAPLUS

DOCUMENT NUMBER:

136:627

TITLE:

Combinations of enzyme inhibitor-containing

preparations and the use in inhibition of mononuclear cells and T-cells and treatment of immune conditions Ansorge, Siegfried; Arndt, Marco; Buehling, Frank;

INVENTOR(S):

Lendeckel, Uwe; Neubert, Klaus; Reinhold, Dirk

PATENT ASSIGNEE(S):

Institut fuer Medizintechnologie Magdeburg G.m.b.H.

IMTM, Germany

SOURCE:

PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.			KIND DATE					A	PPLI	CATI	DATE						
	WO 2001089569				A1 20011129					W								
		W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
															GD,			
															LC,			
															NZ,			
															UA,			
			VN,	YU,	ZA,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM	•	•	•
		RW:													ΑT,	BE,	CH,	CY,
															PT,			
																	•	·
	BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG DE 10025464 A1 20011206 DE 2000-10025464 20000523																	
PRIO	PRIORITY APPLN. INFO.: DE 2000-10025464 A 20000523																	
AB	A me	thod	lis	disc	close	ed wl	nich	per	nits,	, ow:	ing t	to ti	he s	imul	taneo	ous a	and '	joint
	inhi	biti	on o	of th	ne er	ızyme	e act	tivi	ties	of	(1) a	alany	yl-ar	nino	pept:	idase	e and	É
	inhibition of the enzyme activities of (1) alanyl-aminopeptidase and dipeptidyl-peptidase IV, (2) dipeptidyl-peptidase IV and																	
	angi	oten	sin-	-conv	ert:	ing e	enzy	me,	(3)	diper	otidy	/1-pe	eptio	dase	IV a	and		
	prol	yl-c	ligo	pept	idas	se, a	and	(4)	diper	ptidy	/1-pe	eptio	dase	IV.	and			
	X-Pr	o-am	inop	epti	idase	e, tl	ne i	nhib	ition	ı of	DNA	synt	thes	is a	nd th	nus t	the	
	prol	ifer	atio	on of	moı	nonu	:lèa:	r cei	lls a	and T	r cel	lls t	co ai	n ex	tent	whic	ch ca	annot
	be o	btai	ned	by i	indiv	/idua	al a	opli	catio	on of	f the	e en:	zyme	inh	ibit	ors,	ever	n when
	used	in	high	ner d	loses	s. <i>1</i>	Alth	ough	the	abov	∕e-me	entic	oned	inh	ibito	ors :	influ	ience
															lifer			
	immu	ne c	ells	s, th	nis e	effe	t is	s not	con	nplet	e ar	nd no	ot lo	ong-	lasti	ing v	vhen	the
										_				_		_		

inhibitors are used individually. The functional overlapping of enzymic activities results, as is supported by exptl. data, in an additive/superadditive inhibitory effect on DNA synthesis and the proliferation resulting from the simultaneous inhibition of a plurality of the above enzymes. The invention shows that the simultaneous application of inhibitors of the above enzymes or of corresponding prepns. and forms of administration is suitable for the therapy of autoimmune diseases and chronic diseases with an inflammatory genesis, as well as for the treatment of post-transplant rejection episodes.

IT 88768-40-5, Cilazapril

RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(enzyme inhibitor combinations for inhibition of mononuclear cells and T-cells and treatment of immune conditions)

RN 88768-40-5 CAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2002 ACS

5

ACCESSION NUMBER:

2000:513679 CAPLUS

DOCUMENT NUMBER:

133:120681

TITLE:

Preparation of amino acid acyl derivatives as

inhibitors of leukocyte adhesion mediated by

VLA-4

INVENTOR (S):

Konradi, Andrei; Pleiss, Michael A.; Thorsett, Eugene
D.; Ashwell, Susan; Welmaker, Gregory S.; Kreft,
Anthony; Sarantakis, Dimitrios; Dressen, Darren B.;

Grant, Francine S.; Semko, Christopher; Xu, Ying-Zi Elan Pharmaceuticals, Inc., USA; American Home

PATENT ASSIGNEE(S): Elan Ph

Products

DOM I--

SOURCE:

PCT Int. Appl., 342 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

WO 2000043372 Al 20000727 WO 2000-US1686 20000121

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,

DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,

CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1144388 A1 20011017 EP 2000-913245 20000121

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

BR 2000007663 A 20020507 BR 2000-7663 20000121

NO 2001003600 A 20010920 NO 2001-3600 20010720 PRIORITY APPLN. INFO.: US 1999-116923P A2 19990122

US 1999-160999P P 19991021

WO 2000-US1686 W 20000121

OTHER SOURCE(S): MARPAT 133:120681

Disclosed are compds. R2-W:CR1-Q-CR3R3'COX and R2-W'-CHR1-Q-CR3R3'COX [R1 and R2 are joined to form a ring; R3, R3' = H, iso-Pr, -CH2Z or :CHZ, where Z = H, acylamino, alkyl, alkoxy, aryloxy, aryl, aryloxyaryl, carboxy, carboxyalkyl, etc.; Q = O, S, SO, SO2, NH or imino group; W = nitrogen, carbon; W' = nitrogen, carbon, oxygen, sulfur, SO, SO2; X = OH, (un) substituted alkoxy, alkenoxy, cycloalkoxy, cycloalkenoxy, aryloxy, heteroaryloxy or heterocyclyloxy, an amino group] which bind VLA-4. Thus, N-[5-(N-4-toluenesulfonylamino) pyrimidin-4-yl]-L-4-(N,N-dimethylcarbamyloxy) phenylalanine tert-Bu ester was prepd. by condensation of L-4-(N,N-dimethylcarbamyloxy) phenylalanine tert-Bu ester with 2,4-dichloro-5-nitropyrimidine, followed by nitro group redn. and tosylation. Compds. synthesized in the examples are expected to have a binding affinity to VLA-4 expressed by an IC50 of 15 .mu.M or less.

IT 285139-31-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of amino acid acyl derivs. as inhibitors of **leukocyte** adhesion mediated by VLA-4)

RN 285139-31-3 CAPLUS

CN L-Tyrosine, N-(2-chloro-5-nitro-4-pyrimidinyl)-, 1,1-dimethylethyl ester, dimethylcarbamate (ester) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:513676 CAPLUS

DOCUMENT NUMBER: 133:120679

TITLE: Preparation of heterocyclyl amino acid derivatives as

inhibitors of **leukocyte** adhesion mediated by

VLA-4

INVENTOR(S): Konradi, Andrei W.; Pleiss, Michael A.; Thorsett,

Eugene D.; Ashwell, Susan; Sarantakis, Dimitrios;

Welmaker, Gregory S.; Kreft, Anthony; Semko, Christopher; Sullivan, Robert Warren; Soares,

Christopher Joseph; Ly, Kiev Sui; Tarby, Christine M.

PATENT ASSIGNEE(S): Elan Pharmaceuticals, Inc., USA; American Home

Products Corporation

SOURCE: PCT Int. Appl., 305 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                             KIND DATE
                                                            APPLICATION NO. DATE
                                                            -----
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                                      ------
                                                           WO 2000-US1540 20000121
                               A1 20000727
       WO 2000043369
            W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
                 CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
            RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
       EP 1144384
                               A1 20011017
                                                          EP 2000-904487 20000121
            R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                  IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                                         US 1999-116923P A2 19990122
                                                         US 1999-160999P P 19991021
                                                         WO 2000-US1540
                                                                                 W 20000121
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OTHER SOURCE(S): MARPAT 133:120679

Disclosed are compds. R2-W:CR1-Q-CR3R3'COX and R2-W'-CHR1-Q-CR3R3'COX [R1 and R2 are joined to form a ring; R3, R3' = H, iso-Pr, -CH2Z or :CHZ, where Z = H, acylamino, alkyl, alkoxy, aryloxy, aryl, aryloxyaryl, carboxy, carboxyalkyl, etc.; Q = 0, S, SO, SO2, NH or imino group; W = nitrogen, carbon; W' = nitrogen, carbon, oxygen, sulfur, SO, SO2; X = OH, (un) substituted alkoxy, alkenoxy, cycloalkoxy, cycloalkenoxy, aryloxy, heteroaryloxy or heterocyclyloxy, an amino group] which bind VLA-4. Thus, N-[6-[N-benzyl-N-(1-phenylethyl)amino]-4-chloro-1,3,5-triazin-2-yl]-L-4-(dimethylcarbamyloxy)phenylalanine was prepd. by condensation of cyanuric chloride with tyrosine O-(dimethylcarbamate) tert-Bu ester and N-benzylphenethylamine, followed by sapon. Compds. synthesized in the examples are expected to have an IC50 of 15 .mu.M or less.

285140-16-1P IT

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of heterocyclyl amino acid derivs. as inhibitors of leukocyte adhesion mediated by VLA-4)

RN285140-16-1 CAPLUS

CN L-Tyrosine, N-[4-[[2-[[[(3-methylphenyl)amino]carbonyl]amino]ethyl]amino]-1,1-dioxido-1,2,5-thiadiazol-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 4 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

CAPLUS

ANSWER 10 OF 14 CAPLUS COPYRIGHT 2002 ACS

1998:69479 ACCESSION NUMBER:

DOCUMENT NUMBER:

128:200763

TITLE:

ACE-inhibition prevents postischemic coronary

leukocyte adhesion and leukocyte -dependent reperfusion injury

AUTHOR (S):

Kupatt, Christian; Habazettl, Helmut; Zahler, Stefan;

Weber, Christian; Becker, Bernhard F.; Messmer,

Konrad; Gerlach, Eckehart

Elsevier Science B.V.

CORPORATE SOURCE:

Dep. Physiol., Ludwig-Maximilians-Univ., Munich,

80336, Germany

SOURCE:

Cardiovascular Research (1997), 36(3), 386-395

CODEN: CVREAU; ISSN: 0008-6363

PUBLISHER:

Journal

DOCUMENT TYPE: LANGUAGE:

English

Polymorphonuclear leukocytes (PMN), retained in the microvascular bed, can contribute to postischemic myocardial reperfusion injury. Since a beneficial effect of ACE-inhibition on reperfusion injury has been reported, the authors investigated the impact of cilazaprilat on PMN dependent reperfusion injury in isolated guinea pig hearts. Hearts (per group) were subjected to 15 min of ischemia. Immediately thereafter, a bolus of PMN was injected into the coronary system. External heart work (EHW) and total cardiac nitric oxide release were measured. For microscopic evaluation, hearts received rhodamine 6G labeled PMN after ischemia, were arrested 5 min later, and further perfused with FITC dextran (0.1%). Localization of retained PMN was assessed by fluorescence microscopy. Leukocyte activation was studied by FACS anal. of the adhesion mol. CD11b before and after coronary passage of the PMN. ACE-inhibitor cilazaprilat (Cila, 2 .mu.M) and the NO-synthase inhibitor nitro-L-arginine (NOLAG, 10 .mu.M) were used to modulate nitric oxide formation of the heart. Postischemic EHW recovered to 67% (controls) and 64% (Cila) of the preischemic value. Addn. of PMN severely depressed recovery of EHW (39%) and NO release (39% of the preischemic value). Simultaneously, ischemia led to a substantial increase in postcapillary PMN adhesion (from 21 to 172 PMN/mm2 surface) and CD11b-expression of the recovered PMN (3-fold). Cila attenuated postischemic PMN adhesion (83 PMN/mm2) and activation of PMN, whereas it improved recovery of work performance (64%) and NO release (65%) in the presence of PMN. Conversely, NOLAG increased PMN adhesion (284 PMN/mm2) and myocardial injury. Thus, ACE-inhibition prevents leukocyte dependent

reperfusion injury mainly by inhibition of postcapillary **leukocyte** adhesion. The effect may be mediated by NO, given the proadhesive effect of NOLAG.

IT 90139-06-3, Cilazaprilat

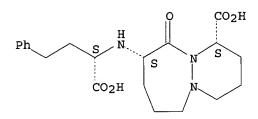
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ACE-inhibition prevents **leukocyte**-dependent reperfusion injury via inhibition of postcapillary **leukocyte** adhesion)

RN 90139-06-3 CAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-carboxy-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1997:805307 CAPLUS

DOCUMENT NUMBER: 128:136326

TITLE: Effects of ACE-inhibition on redox status and

expression of P-selectin of endothelial cells

subjected to oxidative stress

AUTHOR(S): Zahler, S.; Kupatt, C.; Mobert, J.; Becker, B. F.;

Gerlach, E.

CORPORATE SOURCE: Department of Physiology, University of Munich,

Munich, 80336, Germany

SOURCE: Journal of Molecular and Cellular Cardiology (1997),

29(11), 2953-2960

CODEN: JMCDAY; ISSN: 0022-2828

PUBLISHER: Academic Press Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Redox stress during post-ischemic reperfusion may be the prime signal for processes leading to myocardial remodelling and hypertrophy. Nitric oxide (NO) is antioxidative, antiadhesive for neutrophils (PMN) and antiproliferative. Thus, enhancing endothelial prodn. of NO, e.g. by inhibiting breakdown of endogenous bradykinin via angiotensin converting enzyme (ACE), could be beneficial. The effect of cilazaprilat (CILA, 10 .mu.M), an ACE inhibitor, on redox status, expression of the adhesion mol. P-selectin, and PMN adhesion under conditions of oxidative stress was investigated in cultured human umbilical vein endothelial cells (HUVECs). Incubation of the cells with H2O2 (0.1 and 1 mM) for 15 min served as oxidative stimulus. The intra- and extracellular concns. of reduced and oxidized glutathione (GSH and GSSG) were measured by HPLC as indicators of endothelial redox status. Expression of P-selectin was measured by flow cytometry. Furthermore, firm leukocyte adhesion to HUVECs was assessed. In controls, the intracellular ratio GSH/GSSG averaged 47 and dropped to 30 after incubation with 0.1 mM H2O2. The ratio declined to 6.5 with 1 mM H2O2, CILA blocked the effects of 0.1 mM H2O2, but was ineffective against 1 mM peroxide. The extracellular ratio did not discriminate between 0.1 and 1 mM H2O2, falling from 18 to 1 in both situations. P-selectin expression rose from 100% (control) to 146% after 1 mM H2O2 without CILA, but only to 114% in the presence of CILA. PMN

adhesion was enhanced from about 1600 PMN per microwell (control) to 4300/well by 1 mM H2O2. CILA had no significant effect on adhesion (3900 PMN/well). Exposure of HUVECs to 0.1 mM H2O2 affected neither P-selectin expression nor PMN adhesion. Consequently, ACE inhibition can mitigate mild (0.1 mM H2O2) but not more severe redox stress in HUVECs. Irresp., CILA reduced the upregulation of P-selectin at the higher H2O2 concn., indicating that this process is regulated independently of the cellular redox status. The firm adhesion of PMN to HUVECs was independent of P-selectin expression.

IT 90139-06-3, Cilazaprilat

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(effects of ACE-inhibition on redox status and expression of P-selectin of endothelial cells subjected to oxidative stress)

RN 90139-06-3 CAPLUS

CN 6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-carboxy-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L7 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER:

CORPORATE SOURCE:

1997:360040 CAPLUS

DOCUMENT NUMBER:

127:44670

TITLE:

Granulocyte activation by passage through a reperfused

coronary bed: functional consequences of ACE

inhibition

AUTHOR(S):

Zahler, S.; Kupatt, C.; Becker, B.F.; Gerlach, E. Department of Physiology, University of Munich,

Germany

SOURCE:

World Congress for Microcirculation, 6th, Munich, Aug.

25-30, 1996 (1996), 461-464. Editor(s): Messmer, Konrad; Kuebler, Wolfgang M. Monduzzi Editore:

Bologna, Italy. CODEN: 64KQAW

DOCUMENT TYPE:

Conference English

LANGUAGE:

English

External heart work (EHW), NO release, intracoronary PMN retention, and CD11b expression on PMN were detd. in reperfused isolated hearts, without and with modulation of NO metab. by Cilazaprilat (CIL), an ACE inhibitor. EHW recovered postischemic to 67% and 33% in hearts without and with PMN, resp. After ACE inhibition with CIL, it recovered to 65%. Postischemic NO amounted to 59% of the preischemic value, but to only 32% in the presence of PMN, vs. 64% with PMN and CIL. PMN retention in non-ischemic hearts was 23% of the applied no., and 38% after 15min ischemia. CIL reduced postischemic PMN retention to 25%. CD11b expression on PMN was unaltered by passage through nonischemic coronaries, while ischemia increased it 3-fold; CIL blocked this effect. Thus, ACE inhibition preserves NO and cardiac function during reperfusion, and reduces PMN adhesion and activation.

IT 90139-06-3, Cilazaprilat

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(granulocyte activation by passage through reperfused coronary bed: functional consequences of ACE inhibition)

90139-06-3 CAPLUS RN

6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-carboxy-3-CN phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 13 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: DOCUMENT NUMBER:

1997:191352 CAPLUS

TITLE:

Angiotensin converting enzyme inhibitors suppress production of tumor necrosis factor-.alpha. in vitro

and in vivo

126:272066

AUTHOR (S):

Fukuzawa, Masamitsu; Satoh, Jo; Sagara, Mikio; Muto, Gen; Muto, Yoshiko; Nishimura, Sachiko; Miyaguchi, Shuichi; Qiang, Xiao Ling; Sakata, Yoshiyuki; Nakazawa, Tetsuya; Ikehata, Fumiko; Ohta, Setsu;

Toyota, Takayoshi

CORPORATE SOURCE:

Third Department of Internal Medicine, Tohoku University School of Medicine, 1-1 Seiryo-machi,

Aoba-ku, Sendai, 980-77, Japan

SOURCE:

Immunopharmacology (1997), 36(1), 49-55

CODEN: IMMUDP; ISSN: 0162-3109

PUBLISHER:

Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

It has been reported that angiotensin converting enzyme (ACE) inhibitors have beneficial effects on insulin resistance and congestive heart failure, in which elevations of serum tumor necrosis factor-.alpha. (TNF-.alpha.) level have been indicated. Therefore, in this study, we examd. effect of ACE inhibitors on TNF-.alpha. prodn. both in vitro and in vivo by using human blood mononuclear cells and mice, resp. LPS (20 .mu.g/mL)-induced in vitro TNF-.alpha. prodn., measured by bioassay and ELISA, was significantly inhibited with captopril, delapril and cilazapril in a concn. of 10-3 mol/l. A single, oral administration of captopril, delapril and cilazapril at more than 10-fold doses of common clin. use in man significantly inhibited LPS (2 mg/kg)-induced serum TNF-.alpha. activity in Balb/c mice. These results indicate that ACE inhibitors such as captopril, delapril and cilazapril have an inhibitory effect on TNF-.alpha. prodn. not only in vitro as previously reported, but also in vivo, although relatively high concns. and large doses were required in this study.

TΤ 88768-40-5, Cilazapril

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(angiotensin converting enzyme inhibitors suppress tumor necrosis factor-.alpha. formation)

RN88768-40-5 CAPLUS

CN6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 14 OF 14 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1995:845231 CAPLUS

DOCUMENT NUMBER: 123:275949

TITLE: Angiotensin-converting-enzyme inhibitors suppress

synthesis of tumor necrosis factor and interleukin 1

by human peripheral blood mononuclear cells

Schindler, Ralf; Dinarello, Charles A.; Koch, Karl-M. AUTHOR (S):

CORPORATE SOURCE: Department of Nephrology, Medical School Hannover,

Berlin, D-14050, Germany

Cytokine (1995), 7(6), 526-33 SOURCE:

CODEN: CYTIE9; ISSN: 1043-4666

PUBLISHER: Academic DOCUMENT TYPE: Journal LANGUAGE: English

Administration of angiotensin-converting-enzyme (ACE) inhibitors reduce AΒ vascular proliferation following endothelial injury as well as progression of renal disease in various animal models. These effects might be due to interference with cytokines such as interleukin 1 (IL-1) or tumor necrosis factor .alpha. (TNF) since they have been implicated in regulating the effects of vascular cell growth factors such as fibroblast- and platelet-derived growth factors. The authors investigated the in vitro synthesis of IL-1 and TNF from human peripheral blood mononuclear cells (PBMC) in the presence of various ACE-inhibitors. Captopril dose-dependently suppressed the IL-1.beta. induced synthesis of TNF by 74% and the IL-1.beta.-induced synthesis of IL-1.alpha. by 60%. Cytokine synthesis induced by lipopolysaccharide was less affected. At concns. suppressing TNF and IL-1, captopril did not reduce the synthesis of complement C3 in the same cells. Enalapril and cilazapril also suppressed cytokine-induced cytokine synthesis. Ramipril, lisinopril, perindopril and spirapril had no significant effect on TNF synthesis suggesting that the effect was not related specifically to the inhibition of ACE. Accumulation of mRNA for IL-1 and TNF were not affected by captopril, suggesting a posttranscriptional effect. The authors conclude that certain ACE-inhibitors suppress IL-1 and TNF synthesis at a posttranscriptional level and might therefore influence cytokine-mediated cell growth.

TΤ 88768-40-5, Cilazapril

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(ACE inhibitors suppress synthesis of tumor necrosis factor and interleukin 1 by human peripheral blood mononuclear cells)

RN 88768-40-5 CAPLUS

CN6H-Pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid, 9-[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]octahydro-10-oxo-, (1S,9S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> d his

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FILE 'REGISTRY' ENTERED AT 16:53:00 ON 19 SEP 2002

L1 STRUCTURE UPLOADED

L2 937382 S (PYRIMIDIN? OR THIADIAZOL? OR PYRIDAZIN? OR PYRAZIN?)

L3 3 S L1

L4 838 S L1 FUL

L5 619 S L1 SUB=L2 FULL

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L7 14 S L6 AND LEUKOCYTE?

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